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## What is claimed is:

- 1. An isolated DNA molecule comprising a DNA sequence selected from a group consisting of:
  - (i) a sequence of nucleotides as shown in Fig. 1;
  - (ii) a sequence complementary to the sequence according to (i); and
- (iii) a sequence having up to 21% variation from the sequences according to (i) or (ii) which sequence is capable of hybridising thereto under standard hybridisation conditions which codes for a polypeptide of the SOX-9 type.

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- 2. An isolated DNA molecule comprising a DNA sequence selected from a group consisting of:
  - (a) a sequence of nucleotides as shown in/FIG. 8a;
  - (b) a sequence complementary to the sequence according to (a); and
- (c) a sequence having up to 18% variation from the sequences according to (a) or(b) which sequence is capable of hybridising thereto under standard hybridisation conditions and which codes for a polypeptide of the SOX-9 type.
  - 3. A recombinant protein when encoded by a DNA sequence as defined in Claim 1.

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- 4. A recombinant protein when encoded by a DNA sequence as defined in Claim 2.
- 5. A recombinant protein comprising an amino acid sequence as shown in FIG. 1 as well as polypeptides of the SOX-9 type containing 93.5% 100% identity to said sequence.
- 6. A recombinant protein comprising an amino acid sequence as shown in FIG. 8a as well as polypeptides containing 93.5% 100% identity to said sequence.

- 7. A method of regeneration of bone or cartilage by administration of a DNA molecule as claimed in Claim 1.
- 8. A method of regeneration of bone or cartilage by administration of a DNA molecule as claimed in Claim 2,
- 9. A method of regeneration of bone or cartilage by administration of a recombinant protein as claimed in Claim 3.
- 10 10. A method of regeneration of bone or cartilage by administration of a recombinant protein claimed in Claim 4.

